Dry Cleaners Environmental Certification Workbook

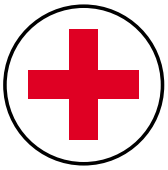
For use with DEP's Environmental Results Program

Massachusetts Department of Environmental Protection

Legend of Icons

The icons below are designed to introduce specific types of information as defined next to each icon.

 = Good Management Practices*

 = Health Hazards

P^2 = Pollution Prevention*

 = Important Information

***Often, Good Management Practices and Pollution Prevention are one in the same.**

If you have questions regarding this workbook or other ERP related questions, please call DEP at 617-338-2255 or 1-800-462-0444 (outside of 617 area code.)

Table of Contents

? Questions ?

Call the DEP Infoline at 617-338-2255 or 1-800-462-0444
(outside of 617 area code)

The Environmental Results Program

1.0 What is the Environmental Results Program?

We at the Massachusetts Department of Environmental Protection have fundamentally redesigned environmental regulation to be less costly and more effective. We have replaced the 25 year-old system of prescriptive case-by-case permits with annual comprehensive compliance certifications, industry wide performance standards and streamlined regulation.

This new, common sense approach to regulation is the Massachusetts Environmental Results Program, a new regulatory system that we believe holds great promise for making it easier to meet — and exceed — Massachusetts' environmental standards. This new approach gives your business the flexibility and information you need to do the job, while improving accountability to the public for environmental performance.

The Environmental Results Program streamlines existing pollution control requirements for your dry cleaning company by combining duplicative, and at times conflicting Federal and state requirements. In addition, your dry cleaning operation will no longer need to get certain air pollution control and water pollution control permits. In exchange, your dry cleaning company will have to submit an annual certification of its compliance with environmental standards. This workbook provides you and your company with the information you need to understand and meet your environmental obligations.

Dry Cleaners Environmental Certification Workbook

Why DEP is Interested in Dry Cleaning

2.0 Why DEP is interested in Dry Cleaning?

You are required by DEP to comply with environmental regulations that apply to you, standards within this workbook and the information contained within ERP Certification Forms. You are required to submit an annual Certification Form to DEP. Failure to comply with these standards (submit the forms or submit the ERP fee) will require correction and possible enforcement action by DEP. Please read each standard and the information carefully and ask questions! DEP is here to assist you in understanding and complying with environmental protection rules.

Professional dry cleaners are an essential part of our communities. Their services save us time and keep our clothing in the best possible condition. Most dry cleaners are family-owned businesses which have been good neighbors for decades. Dry cleaning has become such a routine part of our lives that we rarely think about it.

But growing evidence that the primary chemical used to dry clean clothes, perchloroethylene (perc), can cause damage to our health and the environment, is making people think more about dry cleaning. For example, although most dry cleaners recycle and reuse perchloroethylene within the dry cleaning system, some estimates show that it is possible to lose significant amounts of perchloroethylene from each facility each year. Perchloroethylene is released into the dry cleaning stores, and may be released into the homes of your customers, into your own homes and into the air we all breathe. New innovative technologies which reduce or eliminate the use of perchloroethylene are currently in various stages of development. Many of these technologies, such as wet cleaning, reduce the need for perc, but many challenges exist (see section 5.0).

Perchloroethylene and other cleaning chemicals, if improperly stored and managed, can also be released into the soil and groundwater. Half the people in this country use groundwater (public and private wells) for drinking and many dry cleaners use chemicals that could pollute groundwater if improperly handled. The continuing awareness of environmental risks and the need for protecting public health has resulted in the enactment of more and more laws. The United States Congress has decided that perchloroethylene is one of the toxic air pollutants that will be regulated under the Clean Air Act. This federal law and its regulations are implemented by the United States Environmental Protection Agency (EPA) and state environmental agencies such as the Massachusetts Department of Environmental Protection (DEP). DEP is responsible for implementing air quality protection laws, water protection and waste management laws. This is why DEP is interested in improving the ability of dry cleaners to comply with environmental rules.

The Environmental Results Program is a performance-based regulatory program designed to focus on results and outputs; not specific processes or management practices. However, the dry cleaning process is regulated by the federal government under the Clean Air Acts' Maximum Achievable Control Technology (MACT) regulations. DEP is currently working with the USEPA to improve MACT regulations to be less prescriptive and more protective of human health.

Key Concepts You Need To Know

3.0 Key Concepts

The following are "plain language" definitions. For more specific definitions, regulatory citations are provided in Appendix A Glossary of Terms. The standards contained in this workbook are designed to protect the environment from the following types of pollution.

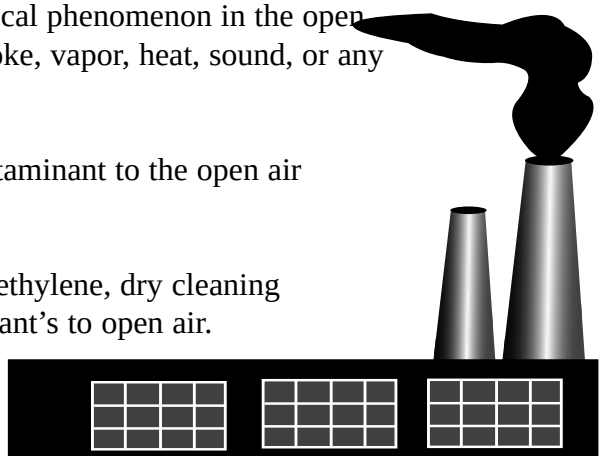
Industrial Wastewater Discharge

Industrial Wastewater is any wastewater resulting from any process of industry, manufacturing, trade or business, regardless of volume or pollutant content.

Discharge is the release of industrial wastewater to the waters of the Commonwealth from any source through pipes, sewers, or other means.

For dry cleaners, industrial wastewaters include: separator water, vacuum water, washing machine water, compressor water and boiler blowdown water.

Air Contaminants or an Air Emission



Air Contaminant is any substance or man-made physical phenomenon in the open air space and includes dust, gas, fume, mist, odor, smoke, vapor, heat, sound, or any combination of these.

Air Emission is any discharge or release of an air contaminant to the open air space.

For dry cleaners, air emissions come from perchloroethylene, dry cleaning machines, boilers, spotting solvents or other contaminant's to open air.

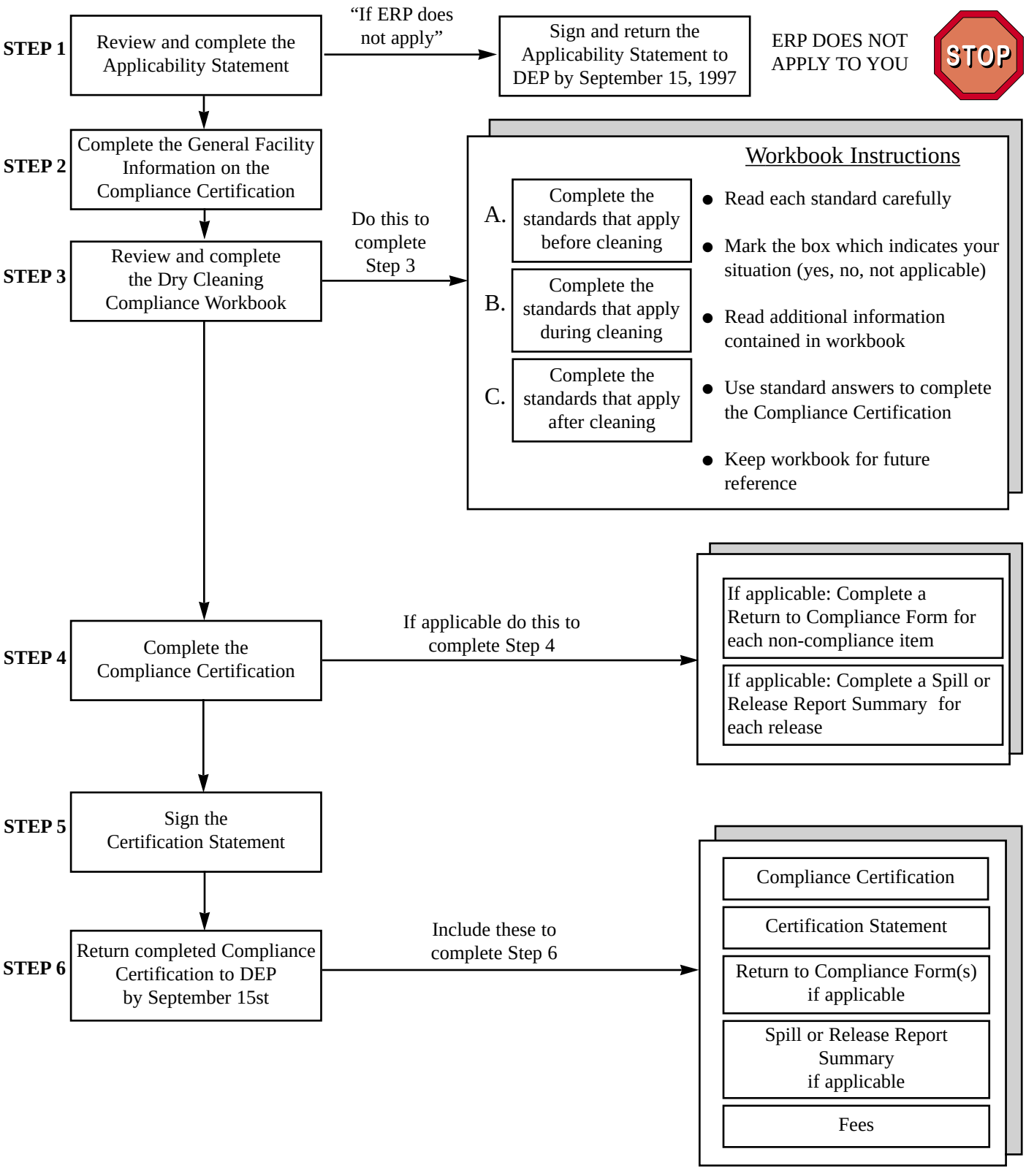
Hazardous Waste

Hazardous waste is a chemical waste you intend to discard, that is dangerous to life and the environment when not handled properly.

For dry cleaners, hazardous waste includes waste perchloroethylene, muck, filters for perchloroethylene, saturated rags/wipes/lint, etc.

How to Use This Workbook to Complete ERP Certification

4.0 Start the dry cleaning workbook here



Standards Before Cleaning

4.1 STANDARDS BEFORE CLEANING YOU NEED TO COMPLY WITH

Air Quality Standards

A-1 Yes ☐ No ☐ On the first day of each month, we record the amount of perchloroethylene bought in the past month. (Certification Question 14)
- See the suggested form in Appendix B-1.

A-2 Yes ☐ No ☐ On the first day of each month, we total the amount the perchloroethylene bought in the prior 12 months. (Certification Question 15)
- See the suggested form in Appendix B-1.

A-3 Yes ☐ No ☐ We store perchloroethylene and other solvents in closed containers. (Certification Question 16)

Hazardous Waste Standards

A-4 Yes ☐ No ☐ We have obtained an EPA Identification Number or a State Notification Number. (Certification Question 18)
- See the example registration forms in Appendix B-3 and B-4.
- If you do not have a number call DEP at 617-338-2255 or 1-800-462-0444 to obtain the appropriate registration form. You must complete the form and submit it to DEP.

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- We use chemical containers that are in good condition.
- Label all chemical containers regardless of the size. Even label "spot" dispensers and other small containers.

- Both the known and potential adverse health effects resulting from perchloroethylene exposure are cause for concern. As a result, proper handling of perchloroethylene and steps to eliminate environmental releases and to minimize human exposure are essential.

P^2

- Use spigot pumps to dispense new materials, and funnels when transferring wastes to storage containers.
- Consider the cost of waste management before buying new chemicals, materials, or accepting samples from vendors.

Standards Before Cleaning (cont'd)

Hazardous Waste Standards

The following Standards will help you determine your status as a Large Quantity Hazardous Waste Generator (LQG), a Small Quantity Hazardous Waste Generator (SQG), or a Very Small Quantity Hazardous Waste Generator (VSQG). Dry Cleaners will most likely be VSQGs or SQGs. If you need help, see Appendix B-2.

A-5 Yes ☐ No ☐

Last year we generated less than 220 pounds of hazardous waste in any month. (Certification Question 17)

- As a Very Small Quantity Generator (VSQG) you are also required to store less than 1320 lbs. of hazardous waste at any one time. See standard C-16.
- If you answered yes to Questions A-5 and C-16, you are a VSQG.

A-6 Yes ☐ No ☐

Last year we generated more than 220 pounds of hazardous waste but less than 2200 pounds in any month. (Certification Question 17)

- As a Small Quantity Generator (SQG) you are also required to store less than 4,400 lbs of hazardous waste and always store it less than 180 days. See standard C-17.
- If you answered yes to Questions A-6 and C-17, you are a SQG.

A-7 Yes ☐ No ☐

Last year we generated more than 2200 pounds of hazardous waste in any month. (Certification Question 17)

- As a Large Quantity Generator (LQG) you are also required to store hazardous waste less than 90 days. See standard C-18.
- If you answered yes to Questions A-7 and C-18, you are a LQG of hazardous waste.
- Additional standards, not in this workbook, apply to you. Consult 310 CMR 30.

A-8 Yes ☐ No ☐ N/A ☐

We are prepared for emergencies by having procedures to notify all of the proper agencies immediately. (Certification Question 19)

- Be prepared to notify:
  - DEP at 617-556-1133 or 1-800-304-1133
  - State Police at 508-820-2121
  - National Response Center at 1-800-424-8802

- Make sure outside contractors who may be spending time in dry cleaning establishments are aware of emergency procedures.
- Read and understand information on Material Safety Data Sheets. It is important to determine how a hazardous substance should be handled.

- At certain levels, perchloroethylene can affect the central nervous system, producing symptoms such as headache, dizziness, nausea, sleepiness and difficulty in speaking and walking.
- To minimize exposure to perchloroethylene in the workplace, make sure that your dry cleaning shop complies with DEP storage and use requirements and that it is adequately ventilated.

P^2

- Consider waste management costs when buying new dry cleaning equipment. Sometimes, a more technologically advanced machine will save in operating expenses.
- Make sure chemical containers won't leak or be damaged by contents such as solvents and perchloroethylene.

Standards Before Cleaning (cont'd)

Hazardous Waste Standards

A-9 Yes ☐ No ☐ N/A ☐ If we are a Small Quantity Generator (SQG) or a Large Quantity Generator (LQG) we are prepared for emergencies by: (Certification Question 19)

★ LQG's should consult 310 CMR 30.340(1)(d)(2) for additional standards.

a. Yes ☐ No ☐ Having an alarm or other communication system to notify employees.

b. Yes ☐ No ☐ Having a telephone, two-way radio or other device which can summon emergency response agencies.

c. Yes ☐ No ☐ Having portable fire extinguishers and spill control equipment.

d. Yes ☐ No ☐ Having adequate supply and water pressure, automatic sprinklers or other fire suppression equipment.

e. Yes ☐ No ☐ Having a program to periodically test emergency equipment.

f. Yes ☐ No ☐ Having a program to train employees for emergencies.

g. Yes ☐ No ☐ Having adequate aisle space and clearly marked exits.

h. Yes ☐ No ☐ Having a program to familiarize and obtain agreements from the local emergency response agencies such as the police department, fire department, hospital, etc.

i. Yes ☐ No ☐ Having a designated emergency coordinator.

j. Yes ☐ No ☐ Having posted names and telephone numbers of emergency coordinators: location of fire alarms and extinguishers; telephone numbers of the fire department; and evacuation routes for that location by the telephone.

- Develop an Emergency or "Contingency" plan for your dry cleaning facility.
- Post emergency numbers by telephones and exits.
- Train all workers on what to do in an emergency.

- Some people can smell perchloroethylene in air when it is at a level as low as one part per one million parts of air (1 ppm). Often, upon exposure to high levels of a chemical such as perchloroethylene for a long period of time the sense of smell becomes less sensitive to that chemical and one then can only detect it at higher levels.

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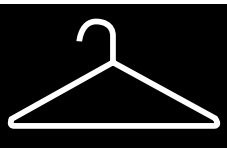
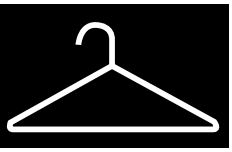
- Tightly seal all bungs and lids on chemical containers.
- Weekly checks for leaks and prompt repairs will save you money and benefit the environment.



Here Is A Helpful Checklist For Emergency Preparedness



Good Management Practices: Emergency Preparedness Checklist

- ☐ Develop procedures for emergencies.
- ☐ Train personnel in emergency procedures.
- ☐ Designate someone in charge, in the event of an emergency.
- ☐ Ensure that your emergency procedures require employees to notify the local fire department, police department and/or DEP in the event of an emergency. You have to notify DEP within two hours after a sudden, continuous or intermittent release to the environment. Perchloroethylene is the most likely chemical dry cleaners will use that is subject to these standards. In general only releases greater that ten (10) pounds should be reported. (The original report should be followed up by a written report to DEP within sixty (60) days.) However, you must also report any emergency or release which threatens human health or the environment (see below).
- ☐ Post emergency information next to telephones.
- ☐ Take action to familiarize police, fire department, hospitals and other local emergency agencies with your place of business.
- ☐ Document all emergency procedures, plans, evacuation emergency training and preparedness activities.
- ☐ Keep emergency equipment on hand and make sure all employees are award of where it is and how to use it.
- ☐ After an emergency occurs, review what happened with employees and correct any problems.
- ☐ Ensure that your emergency procedures identify when you must contact the DEP, Board of Health or National Response Center and how this contact should be made.

  If a release (spill or leak) or threat of release, fire, or explosion of hazardous waste that may threaten human health or the environment occurs call:

  DEP at 617-556-1133 or 1-800-304-1133
  State Police at 508-820-2121
  National Response Center at 1-800-424-8802

Standards During Cleaning

4.2 STANDARDS DURING CLEANING YOU NEED TO COMPLY WITH

Air Quality Standards

B-1 Yes ☐ No ☐ N/A ☐ All of our "dry-to-dry" machines installed on or after December 9, 1991 have a refrigerated condenser. (Certification Question 11)

B-2 Yes ☐ No ☐ N/A ☐ All of our dry-to-dry machines installed before December 9, 1991 have either a carbon adsorber that was installed before September 22, 1993 or a refrigerated condenser. (Certification Question 11)

B-3 Yes ☐ No ☐ N/A ☐ All of our transfer machines were installed before September 22, 1993. (Certification Question 10)

B-4 Yes ☐ No ☐ N/A ☐ All of our transfer machines have either a carbon adsorber installed before September 22, 1993 or a refrigerated condenser. (Certification Question 10)

B-5 Yes ☐ No ☐ We conduct weekly leak checks on the machines in accordance with Appendix C-1 "How to Conduct A Leak Check". (Certification Question 12)

B-6 Yes ☐ No ☐ We use detection equipment for leak checking in accordance with Appendix C-1 "How to Conduct A Leak Check". (Certification Question 12)

B-7 Yes ☐ No ☐ We keep a written log of the leak check activity in accordance with Appendix C-2. (Certification Question 12)

See the suggested form in Appendix C-2.

B-8 Yes ☐ No ☐ If we find a leak, it is repaired within 24 hours
or if it cannot be repaired within **24 hours**
We order the parts within 2 days and install the parts within 5 days of receiving them. (Certification Question 12)

B-9 Yes ☐ No ☐ If we find a leak, a log is kept of the corrective actions in accordance with Appendix C-3. (Certification Questions 12 and 14)

See the suggested form in Appendix C-3.

- Recover solvent from filter cartridges by draining the filters and heating the cartridges to vaporize and capture additional solvent.
- Regularly check air vents for drippage.

- Perchloroethylene can cause skin irritation if it comes into contact with skin repeatedly or for long periods of time. If splashed into the eyes, perchloroethylene can cause burning and irritation of the eyes.
- It is a good idea to periodically monitor your employees' exposure to perchloroethylene at work by having them wear personal exposure badges.

P^2

- Replace faulty/worn gaskets on button trap and around cleaning machine door.
- Consider replacing hazardous pre-spotters with water-based, non-chlorinated pre-spotter.

Standards During Cleaning (cont'd)

Air Quality Standards

B-10 Yes ☐ No ☐ We operate all dry cleaning systems in accordance with manufacturer's specifications and recommendations. (Certification Question 16)

B-11 Yes ☐ No ☐ We close all machine doors immediately after transferring articles and keep the machine doors closed at all times except during maintenance. (Certification Question 16)

B-12 Yes ☐ No ☐ N/A ☐ If we have a refrigerated condenser and it is used on a dry-to-dry machine, dryer or reclaimer, we do not vent or release perchloroethylene contained within the dry cleaning machine to the air. If air is pulled through the door when the door is opened after the cycle, then a diverter valve is used. (Certification Question 11)

B-13 Yes ☐ No ☐ N/A ☐ If we have a refrigerated condenser and it is used on a dry-to-dry machine, dryer or reclaimer. We do not end the cycle (e.g. open the door) until the temperature on the outlet side of the refrigerated condenser has fallen to 45°F/7.2°C. (Certification Questions 13 and 14)

a. Yes ☐ No ☐ The temperature sensor has an accuracy of +/- 2°F/1.1°C.

b. Yes ☐ No ☐ We measure and record the temperature at the end of the cycle on the outlet side of the refrigerated condenser weekly.
See the form in Appendix C-4.

c. Yes ☐ No ☐ If we find a temperature problem it is repaired within 24 hours
or, if it cannot be repaired within 24 hours
We order the parts within 2 days and install the parts within 5 days of receiving them.

d. Yes ☐ No ☐ We keep a written log of the temperature problem, the dates of repair and orders for parts.
See the suggested form in Appendix C-3.

- Use good record keeping practices to keep track of how much material is purchased, delivered and sent off-site as waste.

- Several studies of women in the dry cleaning industry have suggested that perchloroethylene may cause reproductive effects. The studies did not consider all possible causes for this finding, so it is not known for sure if perchloroethylene was responsible. Nevertheless, it would be prudent for pregnant women especially to take precautions to minimize exposure to perchloroethylene as much as possible.

P^2

- Minimize the opening of button traps and lint baskets.
- Minimize the time that the door of the dry cleaning machine is open.

Standards During Cleaning (cont'd)

Air Quality Standards

B-14 Yes ☐ No ☐ N/A ☐ If we have a refrigerated condenser and it is used on a transfer machine washer, we do not vent the perchloroethylene contained within the washer to the air until the washer door is opened, and we do not use the same refrigerated condenser coil for the washer that is used by a dry-to-dry machine, dryer, or reclaimer.
(Certification Questions 13 and 14)

a. Yes ☐ No ☐ The temperature difference between the inlet and outlet stream is equal to or greater than 20°F/11.1°C.

b. Yes ☐ No ☐ We measure and record the inlet and outlet temperature of refrigerated condenser and date weekly.
See the form in Appendix C-5.

c. Yes ☐ No ☐ The temperature sensor has a range from 32°F/0°C to 120°F/48.9°C.

d. Yes ☐ No ☐ The temperature sensor has an accuracy of +/- 2°F/1.1°C.

e. Yes ☐ No ☐ If we find a temperature problem, it is repaired within 24 hours
or if it cannot be repaired within 24 hours,
We order the parts within 2 days and install the parts within 5 days of receiving them.

f. Yes ☐ No ☐ We keep a written log of the temperature problem, dates of repair and of orders for parts.
See the suggested form in Appendix C-3.

- Supervise your deliveries to ensure everything you ordered is delivered and is in good condition.
- Recycle if possible by segregating: cardboard and cardboard boxes; plastic containers and plastic film or wrap; metal and aluminum objects such as hangers; glass which is clean; or used lubricating oil.

- Keep updated copies of Material Safety Data Sheets for all chemicals at the facility and update yearly. This contains important health information.
- Some studies have shown that perchloroethylene can be absorbed by certain foods such as dairy products, meat, fish, poultry, fats, and oils. It's a good idea not to store food or eat and drink in areas where perchloroethylene is stored or used.

P^2

- Involve employees in pollution prevention and safety. All workers should understand and follow, rules and regulations.

Standards During Cleaning (cont'd)

Air Quality Standards

B-15 Yes ☐ No ☐ N/A ☐ If we use a carbon adsorber, we do not allow any air-perc gas-vapor stream to bypass the carbon adsorber to the atmosphere. (Certification Questions 13 and 14)

a. Yes ☐ No ☐ The perchloroethylene concentration in the carbon adsorber exhaust is 100 parts per million (ppm) or less as measured while the machine is venting to the adsorber at the end of the last dry cleaning cycle prior to stripping the adsorber.

b. Yes ☐ No ☐ Each week, we measure and record the perchloroethylene concentration at the sampling port with a colorimetric detector tube and date.
See the suggested form in C-6.

c. Yes ☐ No ☐ The detector tube is designed to measure a concentration of 100 ppm and has an accuracy of +/- 25 ppm.

d. Yes ☐ No ☐ The sampling port is located at least 8 duct diameters downstream from any flow disturbance such as a bend, contraction, or expansion of the exhaust pipe; downstream from no other inlet, and 2 duct diameters upstream from any bend, contraction, expansion, inlet or outlet.

e. Yes ☐ No ☐ If we find a carbon adsorber exhaust problem, it is repaired within 24 hours
or if it cannot be repaired with 24 hours
We order the parts within 2 days and install the parts within 5 days of receiving them.

f. Yes ☐ No ☐ We keep a written log of the carbon adsorber exhaust problem, dates of repair and of orders for parts.
See the form in Appendix C-3.

- Make your cartridge filters last by installing a lint filter in front of them.
- Keep the filter housing full of solvent when you are not using the equipment.
- Operate all emission control systems and dry cleaning machines in accordance with manufacturer specifications to save operating expenses and maintenance costs.

- The typical "background" level of perchloroethylene in outdoor air which most people breathe is less than one part of perchloroethylene per one billion parts of air (1 ppm).
- Background levels of perchloroethylene in air can be several thousand times lower than levels found in some workplaces.

P^2

- Recent research by the EPA has shown wet cleaning systems to be a supplemental alternative to using hazardous cleaning solvents for many types of fabrics. Please see our additional materials regarding wet cleaning in Section 5.0.

Standards During Cleaning (cont'd)

Air Quality Standards

B-16 Yes ☐ No ☐ We keep a copy of design specifications and operating manuals for dry cleaning systems on site. (Certification Question 14)

B-17 Yes ☐ No ☐ We keep all records regarding perchloroethylene purchase receipts, weekly equipment monitoring, weekly leak checks, repair logs, monthly perchloroethylene purchase logs, and yearly perchloroethylene consumption records for 3 years. (Certification Question 14)

☆ An additional Perchloroethylene Consumption Record Form is located in Appendix C-7.

B-18 Yes ☐ No ☐ N/A ☐ We have a boiler and are operating it in compliance with the standards in Appendix C-8. (Certification Question 16)

- Make sure additives you put in the solvent are dissolved before the solvent goes through the filter.
- State governmental agencies such as economic development and small business assistance organizations can help your business with understanding business regulations, financial assistance and access to helpful business information.

- Some studies have shown that nursing women exposed to large concentrations of perc may get perc in their breast milk. The effects of exposing babies to perchloroethylene through breast milk are unknown.

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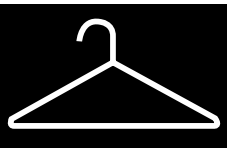
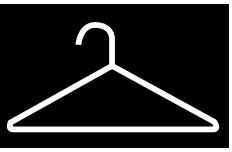
- Be sure bulky items are completely dry before removing them from the dryer. Do not finish-dry them outside the dryer.
- Leaks should be repaired immediately and keep parts on hand. Leaks cost you money, expose workers and contribute to air pollution.



Here Is A Helpful Checklist For Records You Will Need To Keep



Good Management Practices: Record Keeping Checklist

- ☐ Keep Perc Consumption Log
- ☐ Keep Receipts for Perc Purchases
- ☐ Keep Logs on Equipment Maintenance, Leak Detection, Equipment Monitoring, and Equipment Repair*
- ☐ Keep Copies of Hazardous Waste Manifests
- ☐ Keep Wastewater Analysis Records
- ☐ Keep Wastewater Disposal Information and Records
- ☐ Keep Wastewater Treatment Information and Records
- ☐ Keep State or Local Agency Communication Records
- ☐ Keep a Copy of the Signed Compliance Certification, Compliance Workbook and Other Forms or Correspondence
- ☐ Keep Equipment Design Specifications and Operating Manuals
- ☐ Keep Copy of Hazardous Waste Generator Notification Form
- ☐ Keep Copies of Land Disposal Restriction (LDR) Notification with Your Manifests

*May be on the same log sheet

Standards After Cleaning

4.3 STANDARDS AFTER CLEANING YOU NEED TO COMPLY WITH

Air Quality Standards

C-1 Yes ☐ No ☐ We keep a copy of design specifications and operating manuals for each perchloroethylene emission control system on site. (Certification Question 14)

C-2 Yes ☐ No ☐ We store perchloroethylene waste in closed, non-leaking containers. (Certification Question 16)

C-3 Yes ☐ No ☐ N/A ☐ We drain all filter cartridges in their housings or in another sealed container for at least 24 hours before properly handling them as a hazardous waste. (Certification Question 16)

Industrial Wastewater Standards

C-4 Yes ☐ No ☐ We include separator water in our industrial wastewater discharged to the sewer, container, tight tank, evaporator, or we have a federal or state discharge permit. (Certification Questions 1 and 9)

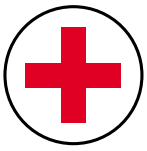
- Dry cleaners should be aware that local agencies or the MWRA may have additional discharge requirements that have to be met.
- Discharges to surface water (e.g. streams, lakes, rivers) require a federal NPDES discharge permit.
- Discharges to groundwater or ground require a DEP groundwater discharge permit.
- Separator water may not be discharged to septic systems, cesspools or leach fields.

C-5 Yes ☐ No ☐ N/A ☐ We never discharge industrial wastewater to surface waters (e.g. streams, lakes) unless we have an NPDES permit from the USEPA. (Certification Question 5)

- If the above statement is true, answer yes.

a. Yes ☐ No ☐ If we have an NPDES permit, we are operating in compliance with the permits conditions.

- Increase use of liquid soaps to prevent clogging in your cleaning systems and industrial wastewater discharges.
- Most dry cleaners use evaporators to treat separator water or use it as make-up water in cooling towers.



- Testing of air in dry cleaning shops has indicated that perchloroethylene levels can be quite high especially for workers who operate or do maintenance work on dry cleaning machines. Dry cleaning workers should wear respirators when they transfer wet clothing or do maintenance work such as cleaning out button traps, lint traps and stills and replacing filters.

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- Convert vented dry-to-dry machines to a closed loop exhaust system.
- Replace transfer machines with dry-to-dry machines.

Standards After Cleaning (cont'd)

Industrial Wastewater Standards

C-6 Yes ☐ No ☐ N/A ☐

We never discharge industrial wastewater from our dry cleaning operations to the ground unless we have a groundwater discharge permit from DEP. (Certification Questions 7 & 8)

- If the above statement is true, answer yes.
- Groundwater permits are often difficult to obtain and conditions of these permits are difficult to maintain.
- You may choose to collect wastewater in a tank or container and dispose of it properly instead of obtaining a permit.

a. Yes ☐ No ☐

If we have a groundwater discharge permit, we are operating in compliance with the permits conditions.

C-7 Yes ☐ No ☐ N/A ☐

If we have a local sewer discharge permit, we operate in compliance with the permits conditions. (Certification Questions 1 and 3)

C-8 Yes ☐ No ☐ N/A ☐

We discharge to a sewer system, other than the Massachusetts Water Resources Authority (MWRA). (Certification Questions 1, 2, and 3)

C-9 Yes ☐ No ☐

We never discharge perchloroethylene in our industrial wastewater discharge to the sewer. (Certification Question 4)

- If this statement is true, answer yes.
- Perchloroethylene can leach out to the ground through leaks in the sewer pipes.

C-10 Yes ☐ No ☐

We never discharge flammable materials such as solvents or oils in our industrial wastewater discharge to the sewer. (Certification Question 4)

- If this statement is true, answer yes.
- Flammable materials create fire and explosion hazards to the sewer workers.

- Some suppliers or vendors can provide you with proper labels and manifests.
- Select reputable chemical suppliers and authorized waste transporters only.
- The easiest way to find out if you are sewered is to check with your local public works, health department or your landlord. If you are not sewered you are discharging to a septic tank, cesspool or leach field.

- Perchloroethylene in high doses has produced liver and kidney damage and liver and kidney cancer in laboratory animals.
- There are no good studies available which indicate that perchloroethylene also causes cancer in humans so the subject is still under debate. Given its potential carcinogenicity, it is recommended that workers take precautions to minimize their exposures to perchloroethylene.

P^2

- Drain all cartridge filters in closed containers.
- Change operating procedures to reduce accidental and material losses. These procedural improvements will also improve productivity.

Standards After Cleaning (cont'd)

Industrial Wastewater Standards

C-11 Yes ☐ No ☐ We never discharge corrosive chemicals in our industrial wastewater discharge to the sewer. (Certification Question 4)

- If this statement is true, answer yes.
- Corrosive materials include materials which have a pH lower than 5.0 or greater than 10.0.
- Corrosive materials, such as acids, "eat up" the pipes and pumps in the sewer system that will contribute to leakage into the ground.

C-12 Yes ☐ No ☐ We never discharge solids in our industrial wastewater discharge to the sewer. (Certification Question 4)

- If this statement is true, answer yes.
- Solids, such as lint can cause blockage and damage to residential and commercial piping and treatment systems.

C-13 Yes ☐ No ☐ We never discharge heated water in our industrial wastewater discharge to the sewer. (Certification Question 4)

- If this statement is true, answer yes.
- Heated wastewater has a temperature equal or greater than 104°F/40°C.

C-14 Yes ☐ No ☐ N/A ☐ We store industrial wastewater in containers and haul it off-site and: (Certification Question 6)

a. Yes ☐ No ☐ We keep records of wastewater analysis;

b. Yes ☐ No ☐ We keep disposal manifests or bills of lading on site, for a period of three years;

c. Yes ☐ No ☐ We use containers that are in good condition;

d. Yes ☐ No ☐ We make sure containers are placed on a surface that does not have any cracks;

e. Yes ☐ No ☐ We provide a spill containment system if containers are stored outdoors;

f. Yes ☐ No ☐ We restrict entry to the general public into the storage areas; and

g. Yes ☐ No ☐ We label all containers with the words "Industrial Wastewater" or "Non-Hazardous Waste".

- Heated wastewater kills the "bugs" that treat the wastewaters in treatment plants allowing the discharge of untreated wastes to the river.
- Please be sure to check all pipes which lead outside your building. If the pipe(s) empty to a street drain it may lead to a stream, river, pond or the pipe(s) may just lead to the ground. These situations typically require permitting.

- People who breathe air with high perchloroethylene levels for a long time may have short term memory problems, lose muscle control, be cranky and confused and have trouble sleeping.

P2

- Do not underload or overload machines. Underloading can cause less efficient solvent use and loss of solvent. Overloading can cause loose belts and make drying difficult.
- We make sure chemical containers are placed on a surface that does not have any cracks.

Standards After Cleaning (cont'd)

Industrial Wastewater Standards

C-15 Yes ☐ No ☐ N/A ☐ We store industrial wastewater in permanent tanks and haul it off-site and: (Certification Question 6)

a. Yes ☐ No ☐ We have a containment structure with 110% capacity of the total volume of all above-ground tanks;

b. Yes ☐ No ☐ We have a bell and light alarm in a conspicuous location if they are remotely/automatically filled tanks. The alarm is activated when the level of wastewater reaches seventy-five (75) percent capacity of the tank and the alarm signal is transmitted to a staffed location. Manually filled tanks are provided with visual or sight glass type of level measurement;

c. Yes ☐ No ☐ We locate our tank(s) to provide year round access for emptying;

d. Yes ☐ No ☐ We have odor control as necessary;

e. Yes ☐ No ☐ Our tanks are made of, or lined with, materials which will not react with, and otherwise be compatible with the industrial wastewater to be stored;

f. Yes ☐ No ☐ We locate our tank(s) in a secured storage area which is free of cracks and gaps that is sufficiently impervious to contain leaks and spills; and,

g. Yes ☐ No ☐ We have a label our tank(s) indicating contents are non-hazardous.

Hazardous Waste Standards

C-16 Yes ☐ No ☐ N/A ☐ If we are a VSQG, we always store less than 1320 lbs of hazardous waste at any one time. (Certification Question 18)

See additional information for VSQG's in Appendix D-1.

- Industry associations for dry cleaners can assist your business through information sharing, technical support, understanding government, finding good suppliers and other valuable services.
- Make sure wall space where emergency signs and posters are located is uncluttered. It may be helpful to remove all other posters which are posted to the walls.

- Pollution can contaminate groundwater and render it undrinkable for years. There are cases of public and private wells being closed because of perc contamination.

P^2

- Place saturated lint from lint baskets in sealed hazardous waste containers.
- Inspect waste storage containers for leaks.

Standards After Cleaning (cont'd)

Hazardous Waste Standards

C-17 Yes ☐ No ☐ N/A ☐ If we are a SQG, we always store less that 4400 lbs of hazardous waste at any one time and always store hazardous waste less than 180 days. (Certification Question 19)
- See additional information for SQG's in Appendix D-1.

C-18 Yes ☐ No ☐ N/A ☐ If we are an LQG, we always store hazardous waste less than 90 days. (Certification Question 19)

C-19 Yes ☐ No ☐ We ship our hazardous waste to a licensed hazardous waste treatment storage or disposal facility or to a permitted hazardous waste recycler. (Certification Question 19)

C-20 Yes ☐ No ☐ We ship our hazardous wastes on a hazardous waste manifest and use a licensed hazardous waste transporter. (Certification Question 19)
- See the example Uniform Hazardous Waste Manifest in Appendix D-2.
- Call DEP at 617-292-5822 for a listing of licensed transporters.

C-21 Yes ☐ No ☐ We label and mark our hazardous waste containers with the words HAZARDOUS WASTE, the name of the waste and type of hazard (e.g., toxic, flammable) and unless we are a VSQG, the date we started storing. (Certification Question 19)
- See example labels in Appendix D-4.
- In most instances the type of waste is perchloroethylene and the hazard type is toxic.

C-22 Yes ☐ No ☐ We keep waste containers closed except when adding waste. (Certification Question 19)

C-23 Yes ☐ No ☐ We use waste containers that are in good condition. (Certification Question 19)
- Waste containers that are dented, leaking or very rusty are considered not in good condition.

- Dry cleaners may want to combine the various checklists and logs into one or two forms with all of the required information on them. Check with your supplier, industry association or other dry cleaners for examples.

- Improperly maintained equipment could lead to air releases of perchloroethylene which could raise the perchloroethylene air levels around your dry-cleaning shop. Perchloroethylene could also leak from improperly stored waste or chemical containers which could lead to a groundwater contamination problem.

P^2

- Often dry cleaning supply companies can supply trays made of plastic or other materials that are put beneath containers to catch leaks or spills.

Standards After Cleaning (cont'd)

Hazardous Waste Standards

C-24 Yes ☐ No ☐

We segregate different wastes into separate containers. (Certification Question 19)

- Waste oil must not be mixed with other waste.

C-25 Yes ☐ No ☐

We have designated an area for storage of only hazardous wastes, it is separated from other areas of operation and it is clearly marked. (Certification Question 19)

- Marking can include a visible line, floor tape or fence.

C-26 Yes ☐ No ☐

We place containers on a surface that does not have any cracks and that will contain leaks and spills. (Certification Question 19)

- Generally, intact concrete will contain leaks or spills.

C-27 Yes ☐ No ☐ N/A ☐

If we store waste in containers or tanks outdoors, we maintain a spill containment system. (Certification Question 19)

- See example of spill containment system and storage/container requirements in Appendix D-5.
- Spill containment most hold either 10% of the maximum volume that can be stored or 110% of the volume of the largest single container, whichever is greater.

C-28 Yes ☐ No ☐ N/A ☐

We restrict entry of unauthorized people into the hazardous waste storage area. (Certification Question 19)

C-29 Yes ☐ No ☐ N/A ☐

We post a sign with the words "HAZARDOUS WASTE" in this area and the sign has letters that are at least one inch high. (Certification Question 19)

- See sign example in Appendix D-6.

C-30 Yes ☐ No ☐ N/A ☐

We separate different types of hazardous wastes in our storage area and stack containers by using pallets. (Certification Question 19)

- Keep records on all environmental management or safety related activities.
- Occasionally, move caution and emergency posters to different locations so they will be noticed and read.

- Studies have shown that dry cleaners can carry perchloroethylene home on their hair, clothes and breath. As a result, workers and their families can breathe air at home that has much higher concentrations of perchloroethylene than the typical "background" perchloroethylene concentration in the homes of non-dry cleaners.

P^2

- Clean lint filters often to maintain equipment efficiency, extend equipment life and reduce maintenance requirements in other parts of the dry cleaning system.

Standards After Cleaning (cont'd)

Hazardous Waste Standards

C-31 Yes ☐ No ☐ In a fire emergency, we would either attempt to extinguish the fire or call the local fire department. (Certification Question 19)

C-32 Yes ☐ No ☐ In the event of a perchloroethylene spill or leak greater than ten (10) pounds we would notify DEP within two (2) hours and follow up the original notification with a written report to DEP within sixty (60) days. (Certification Question 20)

- Releases to the environment could include releases outside of the building, releases to the air, releases to the ground, releases to a storm drain and/or releases to unlined trenches or sumps.

- In the event of a spill or leak that may threaten personnel or the environment we would notify the local fire department, police department and the appropriate DEP Regional Office during normal working hours (8:45AM to 5:00 PM) M-F and ask for the Emergency Response Section at (617) 556-1133.

C-33 Yes ☐ No ☐ In a chemical spill or chemical leak emergency, we would contain the spill to the extent possible and as soon as practicable, clean up the spilled materials and contaminated materials (including contaminated soils). (Certification Question 19)

C-34 Yes ☐ No ☐ We inspect our storage area once per week for leaking containers, we have enough aisle space to conduct inspections and unless we are a VSQG, we keep a log of our inspections. (Certification Question 19)

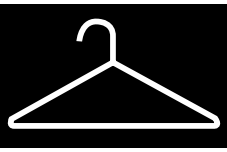
C-35 Yes ☐ No ☐ We maintain our logs, shipping records, and hazardous waste manifests for at least three years. (Certification Question 19)

- You may want to keep manifests and shipping records indefinitely so you can always prove that you handled your waste properly.
- Make sure the fire department knows about your emergency and evacuation plans.

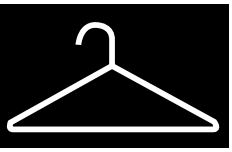
- Make sure you have personal protective equipment for emergencies (such as: goggles, gloves, masks, etc.) and all of your employees known when and how to use it.
- Use decals describing the hazards of perc by placing them on dry cleaning machines and other appropriate areas.

P^2

- Make sure all old chemicals which are no longer needed are disposed of properly.
- Keep hazardous wastes separated from non-hazardous wastes to decrease risk of contamination.



Here Is A Helpful Checklist To Better Manage Containers



Good Management Practices: Container Management Checklist

- ☐ Containers Are In The Area Designated For Chemical Or Hazardous Waste Storage
- ☐ All Containers Are In Good Condition
- ☐ All Containers Do Not Leak
- ☐ Different Wastes And Chemicals Are Stored In Separate Containers
- ☐ All Containers Are Closed When Not Adding Or Removing Materials
- ☐ All Waste And Chemical Containers Are Labeled and Marked
- ☐ Accumulation Dates Are On All Waste Containers
- ☐ A Spill Containment System Is Used for All Waste Containers Or Tanks That Are Stored Outdoors
- ☐ Storage Areas For Hazardous Waste Are Properly Marked
- ☐ All Containers Are Stored On A Surface That Has No Cracks
- ☐ Sign Posted "HAZARDOUS WASTE" Is In The Waste Storage Area(S)
- ☐ The Storage Area Is Secured Against Entry From General Public
- ☐ All Seals and Lids Are Securely In Place
- ☐ The Proper or Compatible Type Of Container Is Being Used for All Wastes And Chemicals

See Appendix D for More Information on Container Management.

Innovative Technologies For Dry Cleaners

5.0 Innovative Technologies For Dry Cleaners

As in many other industries, technology advances are being pursued in garment cleaning to make cleaning processes faster, better and cheaper. A few of the more promising innovative technologies in the garment cleaning industry are discussed below. Sound management practices would encourage dry cleaners to stay abreast of new technology advances since they may offer opportunities for you to do garment cleaning in new and effective ways, with reduced environmental impacts and improved health and safety for business owners, employees and customers. Talk to your suppliers and vendors, your trade associations and environmental agencies. Most of all, be open to new ideas.

Traditional dry cleaning with perchloroethylene (perc) has served the industry well for fifty years and technological improvements continue to reduce the danger from perc exposure or contamination. However, while perc cleans well and is less flammable than previously used organic solvents, the chemical may cause damage to your health and the environment. Exposure to operators, customers and residents near perc dry cleaners is a growing concern. For this reason, new technologies are under development which seek to reduce reliance on perc, and one technology — wet cleaning — is already in limited commercial use. Each of these technologies, like traditional dry cleaning, has strengths, weaknesses and limitations.

Innovative Garment Cleaning Technologies

- **Carbon Dioxide Cleaning** — CO_2 kept in liquid phase at low temperature and high pressure
- **High Flash Point Hydrocarbon Solvent Cleaning** — uses organic solvent instead of perchloroethylene
- **Wet Cleaning** — uses hi-tech washers and dryers plus gentle, less hazardous soaps

CO_2 Cleaning

Eliminates the use of toxic chemicals and the generation of toxic waste and emission. High pressure is required to maintain the CO_2 in liquid form which raises safety concerns and management challenges.

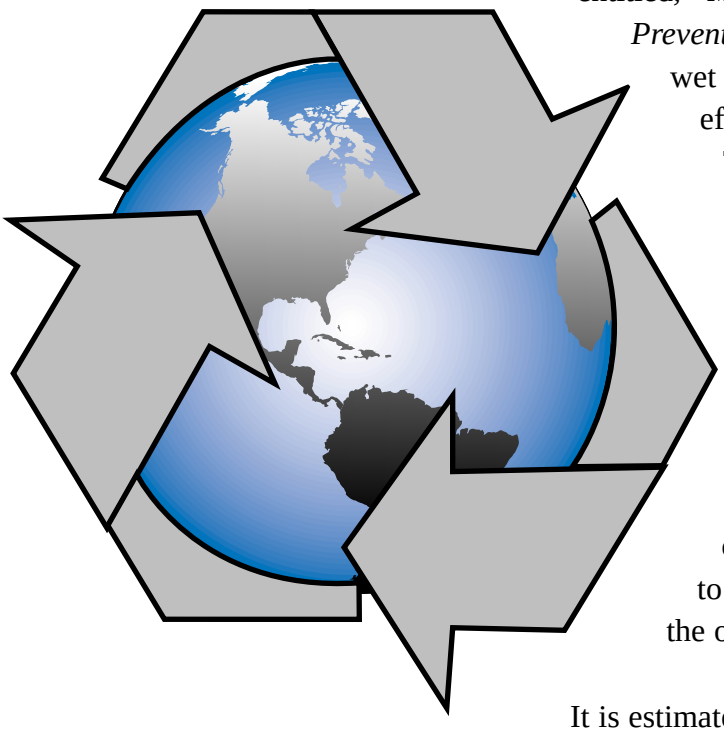
Innovative Technologies For Dry Cleaners (cont'd)

Alternative Hydrocarbon Solvents

Eliminates the use of perc but requires the use of solvents with lower flammability which are now under development as replacements for perc. Flammability remains a concern with the use of these cleaning solvents and volatile organic air emissions may be generated.

Wet Cleaning

Eliminates the use of perc but may increase water use, labor costs and wastewater discharges (of particular concern in areas with septic systems). It is illegal to discharge industrial wastewater into a septic system without a permit. The performance and cost-effectiveness of wet cleaning have been tested through a number of pilot projects and wet cleaning is already being used commercially by a limited number of garment cleaners. While an EPA 1993 report entitled, *"Multiprocess Wet Cleaning," Office of Pollution Prevention and Toxics (EPA 744-R-93-004),* discussed wet cleaning as an effective but not always cost-effective alternative, a more recent report by the Toxic Use Reduction Institute at U/Mass Lowell, *"Garment Wet Cleaning, TURI Cleaner Technology Demonstration Sites Program " (Tech. Report #35),* which considered data on some advanced finishing equipment to minimize labor costs, showed a cost-benefit equation that is positive for wet cleaning. Copies of both reports are available from DEP, TURI or OTA. A curriculum has also been developed by TURI to train dry cleaners or new business owners in the operation of wet cleaning establishments.



It is estimated that 50% or more of garments now dry cleaned could be successfully wet cleaned, using gentle soaps and careful management of the cleaning and drying processes. Many clothes with care labels stating "Dry Clean Only" may be successfully cleaned using the wet cleaning method, however, the care labels have raised the concern of potential customers and may raise liability issues for cleaners. While the Federal Trade Commission is current reviewing care labeling rules to determine which changes are necessary, a small number of commercial wet cleaners have started up operations in this state.

Appendix A

Common Definitions For Some Terms Used In Workbook

Air Contaminant
Any substance or man-made physical phenomenon in the ambient air space and includes, but is not limited to, dust, soot, gas, fume, mist, odor, smoke, vapor, pollen, microorganism, radioactive material, radiation, heat, sound, any combination thereof, or any decay or reaction product thereof. **310 CMR 7.00**

Boiler Blowdown
Water released from boiler after day use to remove impurities and sediment.

Carbon Adsorber
A bed of activated carbon into which an air-perchloroethylene gas-vapor stream is routed and which adsorbs the perchloroethylene on the carbon. Carbon adsorption (sniffer) systems can handle high air flows with low solvent concentrations and reduce solvent vapors in exhaust to 95%. Carbon beds can range in size from 100 to 1000 pounds of activated carbon.

Colorimetric Detector Tube
A glass tube (sealed prior to use), containing material impregnated with a chemical that is sensitive to perchloroethylene and is designed to measure the concentration of perchloroethylene in air.

Container
Any portable device in which an industrial waste is stored, treated, disposed of, or otherwise handled.

Diverter Valve
A flow control device that prevents room air from passing through a refrigerated condenser when the door of the dry cleaning machine is open.

Dry Cleaning System
Dry-to-dry machine and its ancillary equipment or a transfer machine system and its ancillary equipment.

Dry to Dry Machine
A one machine dry cleaning system in which washing and drying are performed within the same machine.

Emission
Any discharge or release of an air contaminant to the ambient air. **310 CMR 7.00**

Appendix A (cont'd)

Hazardous Waste
A waste, or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause, or significantly contribute to an increase in serious irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare or to the environment when improperly treated, stored, transported, used or disposed of, or otherwise managed, however, not to include solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act of 1967 as amended, or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954. **310 CMR 30**

Industrial Wastewater
Wastewater resulting from any process of industry, trade or business, regardless of volume or pollutant content. Wastewater which contains only sanitary waste, an/or non-contact cooling water, compressor or air conditioner condensate is not considered industrial wastewater for purposes of determining applicability of the regulations at **310 CMR 72.02**.

Muck
Residue from a still remaining after distillation of cleaning solvent.

Perceptible Leaks
Any perchloroethylene vapor or liquid leaks that are obvious from: 1. the odor of perchloroethylene; 2. visual observation, such as pools or droplets; or 3. the detection of gas flow by passing the fingers over the surface of equipment.

Perchloroethylene Consumption
The total volume of perchloroethylene purchased based upon purchase receipts or other reliable measures.

Refrigerated Condenser
A vapor recovery system into which an air-perchloroethylene gas vapor stream is routed and the perchloroethylene is condensed by cooling the gas-vapor stream. Refrigerated condensers recover solvent emissions by chilling the air stream below the solvents dew point causing the solvent and water vapor to condense.

Sewage
The water that carries human or animal wastes from residences, buildings, industrial establishments or other places.

Sewer System
Pipelines or conduits, pumping stations, force mains, and all other structures used for collecting and conveying wastes to the site for treatment or disposal.

Appendix A (cont'd)

Storm Drain
Any discernible, confined, and discrete conveyance, including but not limited to any pipe, conduit, ditch, channel, and tunnel used for collecting and conveying storm water run-off directly to the waters of the Commonwealth.

Stormwater Run-Off
Rainfall that is not absorbed by the ground and collected by a storm drain.

Tank
A stationary device used to store or contain an accumulation of industrial waste and which is constructed of concrete, steel, or plastic that can provide structural support.

Transfer Machine
A multiple-machine dry cleaning operation in which washing and drying are performed in different machines. Examples include washer and dryer(s), a washer and reclaimer(s); or a dry-to-dry machine and reclaimer(s).

Temperature Sensor
Thermometer or thermocouple used to measure temperature.

Water Separator
Any device used to recover perchloroethylene from a water-perchloroethylene mixture.

Appendix B

Documentation to be Used With Standards Before Cleaning

- **Steps to Calculate the Amount of Perchloroethylene You Purchased in the Last 12 Months (B-1)**
- **Are You a Very Small, Small or Large Quantity Hazardous Waste Generator (B-2)**
- **EPA Identification Form (3 pages) Example (B-3)**
- **DEP Generator Notification Form Example (B-4)**

Appendix B-1

Steps to Calculate the Amount of Perchloroethylene You Purchased in the Last 12 Months

1) Use the chart below.

2) Add all perchloroethylene purchases made in each of the prior 12 months based on receipts.

3) Enter the correct amount purchased next to the correct month.

4) For the month(s) that you did not purchase Perchloroethylene, the gallons purchased is zero.

5) Add up all the months for a total amount purchased in the last 12 months.

Here is an Easy to Use Chart:

Months	Gallons
1. _____ (Month)	_____ (Amount)
2. _____ (Month)	_____ (Amount)
3. _____ (Month)	_____ (Amount)
4. _____ (Month)	_____ (Amount)
5. _____ (Month)	_____ (Amount)
6. _____ (Month)	_____ (Amount)
7. _____ (Month)	_____ (Amount)
8. _____ (Month)	_____ (Amount)
9. _____ (Month)	_____ (Amount)
10. _____ (Month)	_____ (Amount)
11. _____ (Month)	_____ (Amount)
12. _____ (Month)	_____ (Amount)
Total_____	

Appendix B-2

Are You a Very Small, Small or Large Quantity Hazardous Waste Generator?

Step 1. From your Hazardous Waste manifest copies, confirm your status as a Hazardous Waste Generator by completing the following:

Facility Name_____ Year_____

Amount of Waste Perchloroethylene Shipped on a Hazardous Waste Manifest

My Actual		*Example*	
Month	**Pounds**	**Month**	**Pounds**
January	_____ LBS.	January	0 LBS.
February	_____ LBS.	February	150 LBS.
March	_____ LBS.	March	0 LBS.
April	_____ LBS.	April	240 LBS.
May	_____ LBS.	May	0 LBS.
June	_____ LBS.	June	150 LBS.
July	_____ LBS.	July	0 LBS.
August	_____ LBS.	August	150 LBS.
September	_____ LBS.	September	0 LBS.
October	_____ LBS.	October	150 LBS.
November	_____ LBS.	November	0 LBS.
December	_____ LBS.	December	150 LBS.

Example:
In the above example, there are 6 shipments, the largest shipment is 240 lbs, generated over the shortest period of time which was 2 months, so the maximum generation rate may be considered to be 120 lbs. per month of HW.

Appendix B-2 (cont'd)

Step 2. Use your largest shipment generated over the shortest period of time, and divide it by the time it took to generate that amount like above.

Example:

My largest shipment was **240** LBS, and
It took **2** Month(s) to generate that amount of waste
Generation Rate = Lbs. divided by month(s) = LBS/Month(s)
My maximum generation amount as determined above is **120** per month.

Step 3. Use the chart below to find out if you are a Large Quantity Generator (LQG), Small Quantity Generator (SQG) or a Very Small Quantity Generator (VSQG).

	If Yes...	***If No...***
Step 3a Is the amount you determined more than 2200 lbs. per month?	Contact DEP, you are a Large Quantity Generator	Go to the next question
Step 3b Is the amount you determined more than 220 lbs. per month but less than 2200 lbs. per month?	You are a Small Quantity Generator	Answer next question
Step 3c Is the amount you determined less than 220 lbs. per month?	You are a Very Small Quantity Generator	

Appendix B-3

EPA Identification Form

Application for U.S. EPA Identification Number

Notification of Hazardous Waste Activity in Massachusetts

For official use only:

EPA ID Number

Date Issued

A Instructions

Return to:

MA DEP
Hazardous Waste Management Program,
One Winter Street
7th floor,
Boston, MA
02108
Attn.:
Notifications

Note:
The Massachusetts Department of Environmental Protection is authorized by the U.S. EPA to administer the notification process (310 CMR 30.303(2)).

Please print. For assistance in completing this form, or to report any changes in your hazardous waste activity, call the Hazardous Waste Compliance Assistance line at (617) 292-5898.

Every generator of hazardous waste who is generating more than 27 gallons of hazardous waste per month and/or more than 270 gallons of waste oil per month must have a unique, site-specific federal identification number.

All hazardous waste transporters and receiving facilities must also obtain this federal identification number.

You should allow up to three months for the assignment of this number which will be mailed to you by the U.S. Environmental Protection Agency (EPA). While waiting for the official number, you may self-assign a temporary number by using the prefix MP and your 10 digit telephone number (including area code).

B Applicant Information

1. Notifying company:

Name of Notifying Company

Site of Hazardous Waste Activity

City/Town

State Zip Code

2. Mailing address:

P.O. Box or Street

City/Town

State Zip Code

3. Standard Industrial Classification(s) - (consult your industry fact sheet):

a. Four-digit SIC Code

Description

b. Four-digit SIC Code

Description

4. Contact person to be telephoned regarding information on this form:

Name

Title

Address

Telephone Number including area code and extension

5. Ownership - Enter the name and address of the person or corporate entity which is the legal owner of the business, and the same for the property. Check type of ownership:

Name of Legal Owner of Business

Mailing Address

City/Town State Zip Code

☐ Federal ☐ State ☐ County ☐ Municipal
☐ Indian ☐ Private ☐ Other

Name of Legal Owner of Property

Mailing Address

City/Town State Zip Code

☐ Federal ☐ State ☐ County ☐ Municipal
☐ Indian ☐ Private ☐ Other

Rev. 10/94

Page 1 of 3

EPA Identification Form

Application for U.S. EPA Identification Number

Notification of Hazardous Waste Activity in Massachusetts

C Description of Hazardous Wastes

To complete this section you may need to have your waste analyzed. Consult your industry fact sheet or the Massachusetts Hazardous Waste Regulations (310 CMR 30.000) obtained from the State Book Store, State House in Boston at (617) 727-2834 or Springfield at (413) 784-1376.

Enter the four-digit code for each of your hazardous wastes. Attach additional sheets if necessary. Transporters are not required to complete this item except for waste they generate.

1. _____ 2. _____
3. _____ 4. _____
5. _____ 6. _____
7. _____ 8. _____

D Type of Hazardous Waste Activity

Generator Categories - Check only where applicable:

1. Maximum monthly rates of hazardous waste generation (see 310 CMR 30.000):
   a. ☐ Large Quantity (2,200lbs/270 or more gallons per month or more than 1 kg of acutely hazardous waste)
   b. ☐ Small Quantity (less than 2,200lbs/270 gallons and more than 27 gallons per month or less than 1 kg of acutely hazardous waste)

*Very Small Quantity (less than 100kg/27 gallons per month and no acutely hazardous waste)

2. Maximum monthly rates of waste oil generation:
   ☐ Large Quantity (270 gallons or more per month)

*Small Quantity (less than 270 gallons and more than 27 per month)

*Very Small Quantity (less than 27 gallons per month)

Note for section D:

* If your waste generation is in this category, you need a DEP *Hazardous Waste Generator Registration Form.* Forms may be obtained by calling the Massachusetts Department of Environmental Protection. From the 617 area or outside MA dial (617) 338-2255 and choose *option 2.* From area codes 413 or 508 dial 1-800-462-0444 and choose *option 2.*

Waste Fuel and Used Oil Activity (310 CMR 213-268) - Check only where applicable:

1. ☐ Burn hazardous waste fuel (Federal Boiler & Industrial Furnace Requirements apply.)
   Type of combustion device:
   ☐ utility boiler ☐ industrial boiler
   ☐ industrial furnace
2. Market hazardous waste fuel:
   ☐ generator marketing to burner ☐ other marketer
3. ☐ Burn used oil fuel (Recycling Permit required):
   Type of used oil fuel:
   ☐ specification (Table 310 CMR 30.216)
   ☐ off-specification
   Type of combustion device:
   ☐ space heater ☐ utility boiler
   ☐ industrial boiler ☐ industrial furnace
4. ☐ Market used oil fuel
   Type of used oil fuel:
   ☐ specification ☐ off-specification

License or Permit Activity - Complete this section if a permit, license, or application for license is on file with the Massachusetts DEP. Check only where applicable:

☐ Transporter of hazardous waste
☐ Transporter of waste oil only
☐ Transporter of precious metal waste only
☐ Recycler (commercial/level III)
☐ Treatment, storage disposal facility

Rev. 10/94

Page 2 of 3

EPA Identification Form

Application for U.S. EPA Identification Number

Notification of Hazardous Waste Activity in Massachusetts

E Certification

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment.

"In addition, I understand that any material supplied with this application will not be considered confidential unless I specifically request that such material be kept confidential and the Department has made a determination of confidentiality in accordance with 310 CMR 3.00 regulations governing access to, and confidentiality of, Department records and files under the Hazardous Waste Management Act."

Signature (legal owner or chief operating officer at the site)

Print Name

Official Title

Date Signed

Return to:

MA DEP
Hazardous Waste Management Program,
One Winter Street 7th floor,
Boston, MA 02108
Attn.: Notifications

Rev. 10/94

Page 3 of 3

DEP Generator Notification Form

Example of DEP Generator Notification Form (Front). Sample Only: DO NOT USE - To obtain form call DEP at 617-338-2255 or 1-800-462-0444 FOR MORE INFROMATION.

Massachusetts Department of Environmental Protection - Generator Registration

DEP Region : NE : CE I am registering as: : Very Small Quantity Generator of Hazardous Waste (less than 27 gallons/month)
: SE : WE : Very Small Quantity Generator of Waste Oil (less than 27 gallons/month) or
: Small Quantity Generator of Waste Oil (less than 270 gallons/month)

Name of Company

Mailing Address Street City/Town Zip

Address where waste is produced

Type of Business SIC Code M If you do not have an MAD #, use MV Area Code and Telephone Number

Hazardous Waste Generated (check):	Gallons per Month Prior to Treatment or Recycling	Disposal, Storage, Treatment and/or Recycling. (Name Company and address where waste is taken or type of treatment on site of generation)
: : Waste Oil		
: : Solvent		
: : Acid or Alkali		
Other (name):		
: :		
: :		

I CERTIFY UNDER PENALTY OF LAW that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete

Date Signed Name of Owner or Operator

KEEP BEIGE COPY - SEND WHITE COPY TO DEP REGIONAL OFFICE

DEP Generator Notification Form

Example of DEP Generator Notification Form (Back). Sample Only: DO NOT USE - To obtain form call DEP at 617-338-2255 or 1-800-462-0444 FOR MORE INFROMATION.

Massachusetts Department of Environmental Protection - Generator Registration

Rules for Massachusetts Very Small Quantity Generators

If you are a Very Small Quantity Generator of hazardous waste or waste oil you may self-transport your waste according to the following rules:

- Transport only your own waste
- *Do not* transport acutely hazardous waste
- Transport no more than 55 gallons a trip
- Label your containers properly:

Hazardous Waste:
Type of Waste:
Type of Hazard:

- Seal container tightly and secure to vehicle
- Keep a copy of your VSQG registration in your vehicle
- Obtain a receipt for your waste
- Keep your receipts for three years

Return the white copy of this form to the appropriate DEP Regional Office:

- DEP Metro Boston/Northeast Regional Office
  Attn: Hazardous Waste Registrations
  10 Commerce Way
  Woburn, MA 01801
  617-932-7600
- DEP Western Regional Office
  Attn: Hazardous Waste Registrations
  436 Dwight Street
  Springfield, MA 01103
  413-784-1100
- DEP Central Region
  Attn: Hazardous Waste Registrations
  75 Grove Street
  Worcester, MA 01605
  508-792-7650
- DEP Southeast Regional Office
  Attn: Hazardous Waste Registrations
  20 Riverside Drive
  Lakeville, MA 02347
  508-946-2700

For hazardous waste compliance assistance call 617-292-5898
For permitting questions and application forms, call the DEP InfoLine:
338-2255 from 617 and outside Massachusetts
800-462-0444 from area codes 413 and 508
To report a spill, call DEP at (617) 292-5500, 24 hours a day

Rev. 10/94

Appendix C

Documentation to be Used with Standards During Cleaning

- **How to Conduct a Leak Check (C-1)**
- **Multiple Equipment Leak Check Inspection Log Form — Dry Cleaning Machines (C-2)**
- **Corrective Log Form (C-3)**
- **Equipment Monitoring Log Form — Refrigerated Condenser (Reclaimer, Dryer, Dry-to-Dry) (C-4)**
- **Equipment Monitoring Log Form — Refrigerated Condenser (Washer) (C-5)**
- **Equipment Monitoring Log Form — Carbon Adsorber (C-6)**
- **Perchloroethylene Consumption Record Form (C-7)**
- **Requirements for Dry Cleaners with Boilers (C-8)**

Appendix C-1

How To Conduct A Leak Check

Step 1 Get checklist (Equipment Leak Check Log Form) and leak detection equipment.

Note: The Department of Environmental Protection (DEP) requires each facility to use one of the following devices to detect leaks at dry cleaning facilities. Leak detection equipment must be operated and calibrated in compliance with manufacturer's specifications.

1) a halogenated-hydrocarbon detector
2) a portable gas analyzer
3) an air sampling pump and colorimeteric tube
4) an alternative device approved by the Department

In addition, you must check for perceptible leaks, that is you must use your senses (e.g. sight, smell or touch) to detect leaks.

Step 2 Go to machines and locate proper leak detection points.

Required: Proper leak detection points are hose & pipe connections, fittings, couplings, valves, door gaskets & seatings, pumps, solvent tanks & containers, water separators, muck cookers, stills, exhaust dampers, diverter valves, filter gaskets & seatings and cartridge filter housings.

Step 3 Record readings from the leak detection equipment and record readings on the form for that machine.

Note: A vapor leak is an emission of perchloroethylene vapor from unintended openings in the dry cleaning system. Leaks waste Perchloroethylene and your money. Please fix leaks promptly.

If you find a leak, you must complete steps 4 or 5

Step 4

- Record the leak detection.
- Repair the leak within 24 hours.
- Record the activity you used to repair the leak.

Step 5

- If it is necessary to order a new part, order the part within 48 hours of leak detection.
- Fix leak within 5 days after receiving parts.
- Record the activity you used to repair the leak.

Step 6

- Keep all records of leak checks and repairs.

Appendix C-2

Example: Multiple Equipment Leak Check Inspection Log Form

Date _____ Inspector _____

Inspection done by: Monitoring Instrument

Inspect the following items for leaks. Circle Yes or No.

	Signs of Leaking		
	Machine No.	Machine No.	Machine No.
Hose & Pipe Connections, Fittings, Couplings, Valves	Yes/No	Yes/No	Yes/No
Door gaskets & Sealings	Yes/No	Yes/No	Yes/No
Pumps	Yes/No	Yes/No	Yes/No
Solvent Tanks & Containers	Yes/No	Yes/No	Yes/No
Water Separators	Yes/No	Yes/No	Yes/No
Muck Cookers	Yes/No	Yes/No	Yes/No
Stills	Yes/No	Yes/No	Yes/No
Exhaust Dampers	Yes/No	Yes/No	Yes/No
Diverter Valves	Yes/No	Yes/No	Yes/No
Filter Gaskets & Sealings	Yes/No	Yes/No	Yes/No
Cartridge Filter Housings	Yes/No	Yes/No	Yes/No

If Yes was answered to any of the above, attach a completed corrective action report.

Appendix C-3

Example: Corrective Log Form

Date of initial inspection _____

Machine No._____

Inspector _____

Describe Problem:

Are Parts Needed Yes No
(Circle One)

Date Ordered _____

Date Received _____

Date Installed _____

Date problem corrected _____

Explain:

Appendix C-4

Example: Equipment Monitoring Log Form — Refrigerated Condenser (Reclaimer, Dryer, Dry-to-Dry)

For a dry-to-dry machine, a dryer, or a reclaimer, measure the temperature on the outlet side of refrigerated condenser

Date	Inspector's Initials	Machine No.	Temperature	Is Temp. > 45°F/7.2°C?
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

If the temperature was greater than 45° F/7.2 °C attach a completed corrective action report.

Appendix C-5

Example: Equipment Monitoring Log Form: Refrigerated Condenser (Washer)
Refrigerated Condenser used for Washer

Date	Inspector's Initials	Machine No.	Inlet Temp	Outlet Temp	Temperature Difference	Is Temp Difference < 20°F/11.1°C
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No
						Yes / No

Temp Difference= Inlet Temp - Outlet Temp

If the temperature difference is less than 20°F/11.1°C, attach a completed corrective action report.

Measurements of the inlet and outlet streams shall be with a temperature sensor. Each temperature sensor shall be used according to the manufacturer's instructions, and designed to measure at least a temperature range from 32°F/0°C to 120°F/48.9°C to an accuracy of 2°F/1.1°C.

Appendix C-6

Example: Equipment Monitoring Log Form: Carbon Adsorber

Measure the concentration of the PERC in the exhaust duct after the carbon adsorber

Date	Inspector's Initials	Machine No.	Concentration (PPM)	Is Concentration > 100 PPM?
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

If concentration is greater than 100 PPM, attach a completed corrective action report.

Appendix C-7

Example:
PERC Consumption Record

Store: _____

Year: _____

Month	PERC Purchased Gallon	12 Month Total Gallon	Notes

On the first business day of each month, you are required to calculate the amount of perc purchased in the previous month based on receipts, if no perc purchases were made in a given month, record zero for the month, sum the total perc purchased in the prior 12 months.

Appendix C-8

Requirements for Dry Cleaners With Boilers

Requirements applicable to all boilers

- The boilers must not smoke or cause a nuisance when operated.
- You may not burn any fossil fuel with an ash content of more than 4% by dry weight, unless you obtain a plan approval from DEP.
- You may not burn distillate fuel oil no. 2 (home heating oil) with a sulfur content greater than .3%. Your fuel supplier should be providing you with compliant fuels.

Requirements for boilers with a rated capacity of less than 3 MBTU
(Note: most dry cleaners' boilers are smaller than 3 MBTU)

- Only natural gas, distillate oil (home heating oil, for example) or solid fuel (wood, coal) may be used as fuel. All other fuels, including residual fuel oil, waste oil, hazardous waste fuel are prohibited.

Requirements for boilers with a rated capacity of 3 MBTU or more

- The boiler must be inspected and maintained according to the manufacturer's recommendation.
- The boiler must be tested for efficient operation at least once per year, and the results of the test must be posted where they can be easily seen on or near the boiler.

Requirements if you are approved to burn residual fuel oil

- If your facility is located in the Berkshire Air Pollution Control District or Merrimack Valley Air Pollution Control District except those cities and towns listed below, you may not burn fuel with more than 1.21 pounds of sulfur per million BTU (2.2% sulfur fuel oil) unless you have a plan approval from DEP.
- You may not burn residual fuel oil, landfill gas, used oil fuel, digester gas, or hazardous waste fuel unless you have a plan approval from DEP.
- If you are in the City of Worcester, your burner must have a design approval by DEP.
- You may not burn coal unless you obtain a plan approval from DEP.

Requirements for Dry Cleaners With Boilers (cont'd)

Requirements if you are approved to burn residual fuel oil (cont'd)

- You must obtain a plan approval from DEP if your boiler has a rated capacity of 10 MBTU or greater. (Note: a 10 MBTU boiler is large enough to fuel a large high school.)

- You must obtain a plan approval from DEP if your boiler has a rated capacity of 5 MBTU or greater and use residual oil with 1% sulfur or above.

- If your facility is located in the following cities and towns in the Metropolitan Air Pollution Control District: Arlington, Belmont, Boston, Brookline, Cambridge, Chelsea, Everett, Malden, Medford, Newton, Somerville, Waltham, or Watertown, you may not burn fuel with more than .28 pounds of sulfur per million BTU (.5% sulfur fuel oil) unless you have a permit from DEP.

- If your facility is located in Worcester; the following towns in the Merrimack Valley Air Pollution Control District: Lawrence, Andover, Methuen, North Andover; the Central Massachusetts Air Pollution Control District, the Metropolitan Boston Air Pollution Control District except those cities and towns listed above; the Pioneer Valley Air Pollution Control District, the Southeastern Massachusetts Air Pollution Control District, you may not burn fuel with more than .55 pounds of sulfur per million BTU (1% sulfur fuel oil) unless you have a plan approval from DEP.

Appendix D

Documentation to be Used with Standards During Cleaning

- **Small Quantity Generator Information and Standards (D-1)**
- **Example of Uniform Hazardous Waste Manifest (D-2)**
- **Very Small Quantity Generator Standards That Self-Transport (D-3)**
- **Example of Waste Container Labels (D-4)**
- **Example of Secondary Containment(D-5)**
- **Example of Storage Area Sign (D-6)**

Appendix D-1

Hazardous Waste Standards For Small Quantity Generators (SQGS) (310 CMR 30.351[8])

The EPA Identification Number (EPA ID) (310 CMR 30.303)

- In order to have your waste accepted by a licensed hauler or treatment/storage facility, you will be assigned a 9-digit number, with the prefix 'MAD', for your location. This number will be entered on each manifest in Block 1.

In order to get an EPA ID, call DEP at (617-388-2255 or 1-800-462-0444, outside the 617 area code) for an application for an EPA Identification Number. Mail the completed application to the office listed in the instructions. Your number will be mailed to you within a few months. While you are waiting for a permanent EPA ID, you can use a temporary ID beginning with the letters MP, followed by your 10-digit telephone number.

- The ID number is site-specific. You are required to notify DEP's Division of Hazardous Waste of any change in your address, name of company, contact person or generator status.

Shipping Your Hazardous Waste (310 CMR 30.304, 30.305)

- All hazardous waste must be transported in containers that are labeled with the words HAZARDOUS WASTE, the name of the waste, type of hazard (e.g., toxic, flammable), generators name, address and EPA ID number. Refer to the container standards described on page 8 of this summary.

A list of licensed transporters and Massachusetts treatment, storage or disposal facilities is available from the DEP by calling (617) 292-5822. Many transporters are authorized to assist you in preparing your waste shipment.

Standards for Containers and Tanks (310 CMR 30.680, 30.690)

Your accumulation or storage area must meet the following condition for both containers and tanks. (NOTE: VSQG's are also required to meet certain of these standards.)

- Above-ground tanks and containers must be on a surface which does not have any cracks or gaps and is impervious to the hazardous wastes being stored and on pallets if containers are stacked;
- Area must be secured against unauthorized entry;
- Area must be clearly marked (e.g., by a visible line or tape, or by a fence) and be separate from any points of generation;
- Area must be posted with a sign: "HAZARDOUS WASTE" in capital letters at least one inch high;
- An outdoor area must have secondary containment, such as a berm or dike, which will hold any spill or leaks at:
  - — 10% of the total volume of the container, or
  - — 110% of the volume the largest container, which ever is larger.

Appendix D-1 (cont'd)

Hazardous Waste Standards For Small Quantity Generators (SQGS) Continued (310 CMR 30.351[8])

Standards for Containers and Tanks cont'd (310 CMR 30.680, 30.690)

- Any spillage must be promptly removed.

- Each container and tank must be clearly and visibly labeled throughout the period of accumulation with the following:
  - — the words "HAZARDOUS WASTE"
  - — the name of waste (e.g., waste oil, acetone)
  - — the type of hazard(s) (e.g., ignitable, toxic)
  - — date on which accumulation began. (SQG only)

- Each container must be in good condition
- Wastes of different types must be segregated. This includes not mixing waste oil or used fuel oil with other wastes. Be careful not to put incompatible wastes in the same container or put wastes in unwashed containers that previously held incompatible wastes.
- Separate containers of incompatible wastes by a berm, dike or similar structure.
- Each container holding hazardous wastes must be tightly closed throughout the period of accumulation, except when the waste is being added or removed.
- Containers holding ignitable or reactive wastes must be at least 15 meters (50ft) from the property line. If this is not possible or practical you must store such containers in compliance with all applicable local ordinances and by-laws.
- Inspect your accumulation area at least once a week for any leaking or deterioration of your containers. You must have enough aisle space between your containers to allow for inspections.

If you are a Large Quantity generator (LQG) please contact DEP at 617-338-2255 or 1-800-462-0444 for additional information and requirements.

Appendix D-2

The Manifest (310 CMR 30.310)

As a generator you always retain responsibility for your hazardous waste. If your waste is dumped or disposed of improperly, you can be held responsible. It is therefore important that you know where your waste is going and that it is handled properly and safely.

Federal law (the Resource Conservation and Recovery Act of 1976, known as RCRA) requires a national 'cradle to grave' tracking system for hazardous waste. In Massachusetts, every shipment of hazardous waste by a large or small generator must be transported by a licensed hauler and sent to a licensed treatment, storage or disposal facility (TSDF) or a permitted recycling facility and must be accompanied by a shipping document, called the Uniform Hazardous Waste Manifest.

You must use the Massachusetts Manifest form unless you are sending your waste to a facility out of State, in which case you should contact the other state to find out which form to use. You are responsible for completing the generator portion of the manifest. Directions for the distribution of the copies are on the back of the manifest. A copy will be returned to you when the facility has accepted your shipment.

Note the generators certification statement on your manifest, which you must sign:

> "If I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."

All generators must keep copies of all manifests and any records of tests and analysis done of their hazardous waste for at least 3 years, and for the duration of any enforcement action.

Appendix D-2 (cont'd)

Example of Uniform Hazardous Waste Manifest

Example of Mass Hazardous Waste Manifest- **SAMPLE ONLY DO NOT USE**. To optain form call DEP at 617-338-2255 or 1-800-462-0444 FOR MORE INFORMATION.

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street
Boston, Massachusetts 02108

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address | A. State Manifest Document Number: MA J16A5C3

4. Generator's Phone ( ) | B. State Gen. ID

5. Transporter 1 Company Name | 6. US EPA ID Number | C. State Trans. ID

7. Transporter 2 Company Name | 8. US EPA ID Number | G. Transporter's Phone | E. State Trans. ID

9. Designated Facility Name and Site Address | 10. US EPA ID Number | F. Transporter's Phone | G. State Facility's ID: Not Required | H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.) | K. Handling Codes for Wastes Listed Above

a. | b.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Date: Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Date: Month Day Year

EPA Form 8700 22 (Rev. 9-94) Previous editions are obsolete.

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA J16A5C3 COPY>1: FACILITY MAILS TO DESTINATION STATE

COPY>1: FACILITY MAILS TO DESTINATION STATE

Appendix D-3

Standards For Very Small Quantity Generators (VSQG's) That Self-Transport Their Own Hazardous Wastes

Self-Transport Option Requirements

As a registered VSQG you may transport your own hazardous waste under the following conditions:

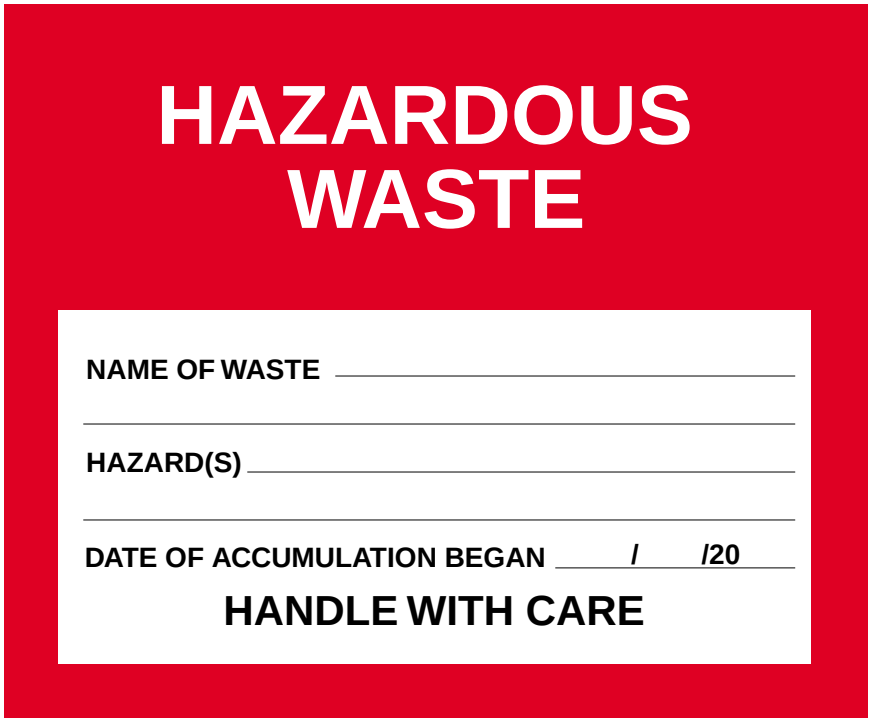
- You may transport waste to a licensed treatment, storage or disposal facility; permitted recycling facility; or, another registered generator who will count your waste as part of their generation rate;
- You transport only the waste that you generated on your premises;
- You do not transport more than 440 lbs at one time;
- Your waste is in containers that are:
    - — no larger than 55 gallons in volume
    - — compatible with the waste
    - — tightly sealed
    - — labeled as "HAZARDOUS WASTE"
    - — labeled with the name of the waste and the type of hazard
      (In most instances the type of waste is perchloroethylene and the hazard type is toxic)
    - — tightly secured to the vehicle;
- You do not transport incompatible wastes in the same shipment;
- In the event of a spill or leak of hazardous waste that may threaten human health or the environment you notify DEP or the State Police, as described in question C-32 of the workbook;
- You must have a copy of your registration with DEP in the vehicle;
- You must be in compliance with federal Department of Transportation (617-494-2770) and Massachusetts Department of Public Safety (617-566-4500) requirements.

Record-keeping for VSQG's

- If you are not using a licensed transporter but are transporting your own wastes, you do not need a manifest form. You must, however, keep a record of the type and quantity, as well as the date, of the transport and treatment or disposal of your waste. You will need proof of the receipt of the waste by the facility or generator.
- Although it is not required you may want to keep your shipping records indefinitely so you can always prove that you handled your waste properly.

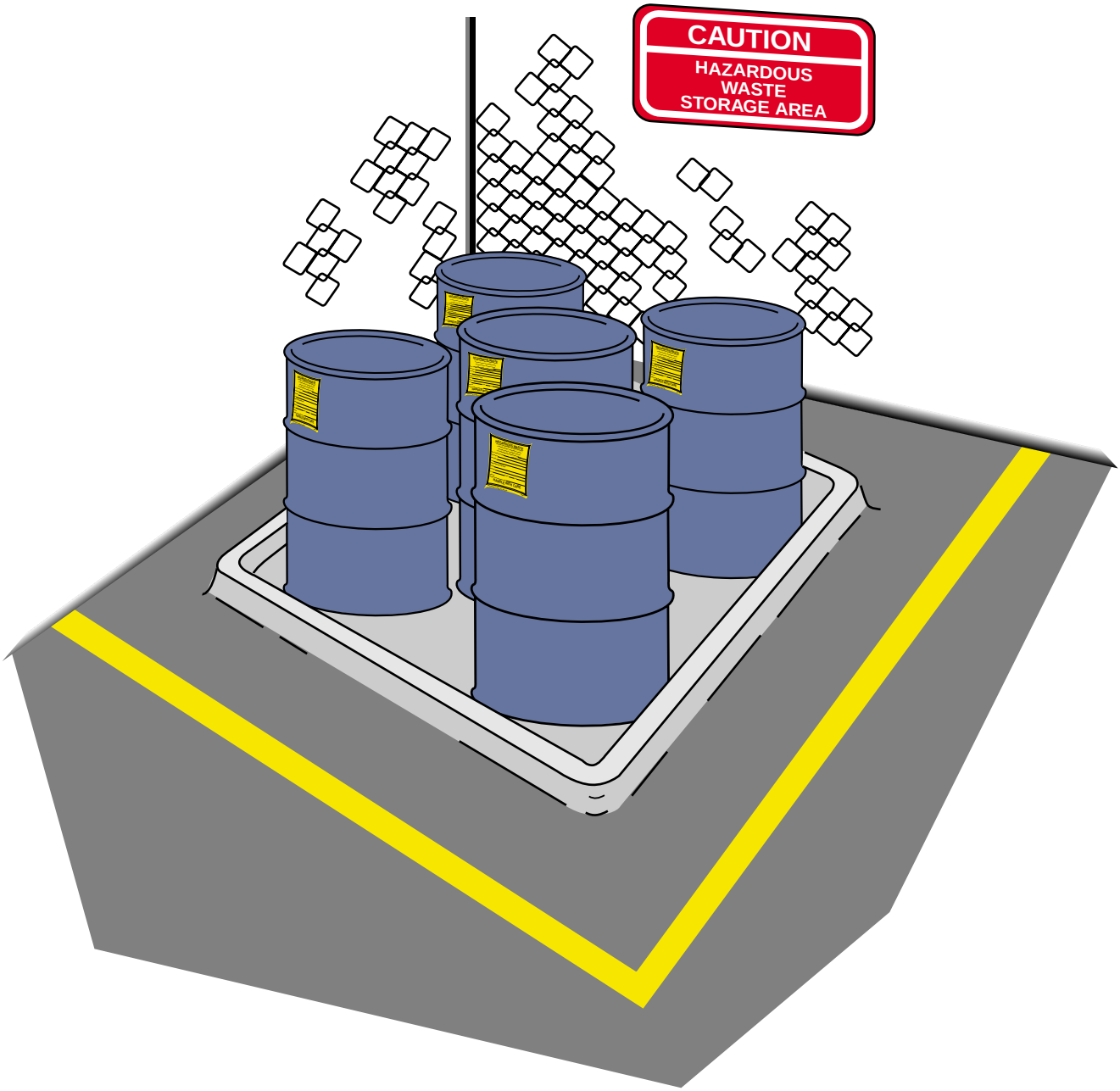
Appendix D-4

Example of Waste Container Labels



Appendix D-5

Example of Secondary Containment System



Appendix D-6

Example of Storage Area Sign

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